WHAT IS CLAIMED IS:

1. In a method of making a sheet from a fibrous furnish, the improvement which comprises preparing a nascent web while controlling its porosity and at least partially throughdrying said web wherein airflow through said sheet exhibits a characteristic Reynolds Number of less than about 1 and a characteristic dimensionless throughdrying coefficient of from about 4 to about 10.

2. The improvement according to claim 1, wherein the airflow through said sheet exhibits by a characteristic Reynolds Number of less than about 0.75.

3. The improvement according to Claim 2, wherein the airflow through said sheet exhibits a characteristic Reynolds Number of less than about 0.5.

4. The improvement according to Claim 1, wherein airflow through said sheet exhibits a characteristic Reynolds Number of less than about 0.75 and a characteristic dimensionless throughdrying coefficient of from about 5 to about 7.

5. The improvement according to Claim 1, wherein said sheet is an absorbent sheet prepared from a cellulosic furnish and characterized by a hydraulic diameter of from about 3×10^{-6} ft to about 8×10^{-5} ft with the provisos: (a) that when the void volume fraction of said sheet exceeds about 0.72, the hydraulic diameter of the sheet is less than about 8×10^{-6} ft; and (b) that when the void volume fraction of the sheet exceeds about 0.8, said hydraulic diameter of said sheet is less than about 7×10^{-6} ft and wherein further said absorbent sheet is characterized by a wet springback ratio of at least about 0.6.

6. The improvement according to Claim 5, wherein said absorbent sheet is characterized by a wet springback ratio of at least about 0.65.

7. The improvement according to Claim 6, wherein said absorbent sheet is characterized by a wet springback ratio of between about 0.65 and about 0.75.

8. The improvement according to Claim 7, wherein said absorbent sheet is characterized by a hydraulic diameter of from about 4×10^{-6} ft to about 6×10^{-5} ft.

9. The improvement according to Claim 5, wherein said absorbent sheet is characterized by a hydraulic diameter of between about 4×10^{-6} ft and about 8×10^{-6} ft.

10. The improvement according to Claim 8, wherein said absorbent sheet is characterized by a hydraulic diameter of up to about 7×10^{-6} ft.

11. The improvement according to Claim 1, wherein said sheet is prepared from a fibrous furnish comprising fiber other than virgin cellulosic fiber.

12. The improvement according to Claim 11, wherein said furnish comprises a non-wood fiber selected from the group consisting of straw fibers, sugarcane fibers, bagasse fibers and synthetic fibers.

13. The improvement according to Claim 11, wherein said absorbent sheet comprises recycled fiber.

14. The improvement according to Claim 13, wherein the recycled fiber in said absorbent sheet comprises at least about 50 percent by weight of the fiber present in the sheet.

15. The improvement according to Claim 14, wherein the recycled fiber present in said absorbent sheet comprises at least about 75 percent by weight of the fiber present in the sheet.

16. A wet crepe, throughdry process for making sheet comprising the steps of:

(a) depositing an aqueous fibrous furnish on a foraminous support;
(b) compactively dewatering said furnish to form a web;
(c) applying said dewatered web to a heated rotating cylinder and drying said web to a consistency of greater than about 30 percent and less than about 90 percent; and
(d) creping said web from said heated cylinder at said consistency of greater than about 30 percent and less than about 90 percent;
(e) throughdrying said web subsequent to creping said web from said heated cylinder to form said sheet,

wherein the furnish composition and processing of steps (a), (b) and(c), as well as the creping geometry, temperature profile of the web upon creping, moisture profile of the web upon creping, and web adherence to the heated rotated cylinder are controlled such that airflow through said sheet exhibits a characteristic Reynolds Number of less than about 1 and a characteristic dimensionless throughdrying coefficient of from about 4 to about 10.

17. The process according to Claim 16, wherein said sheet has a basis weight of at least about 12 lbs per 3,000 ft^2.

18. The process according to Claim 17, wherein said sheet has a basis weight of at least about 15 lbs/3000 ft^2.

19. The process according to Claim 18, wherein said sheet has a basis weight of at least about 20 lbs/3000 ft^2.

20. The process according to Claim 19, wherein said sheet has a basis weight of at least about 25 lbs/3000 ft^2.

21. The process according to Claim 20, wherein said sheet has a basis weight of at least about 30 lbs/3000 ft^2.

22. The process according to Claim 16, wherein said web is dewatered to a consistency of at least about 30 percent prior to being dried on said heated cylinder.

23. The process according to Claim 22, wherein said web is dewatered to a consistency of at least about 40 percent prior to being dried on said heated cylinder.

24. The process according to Claim 23, wherein said web is dried to a consistency of at least about 50 percent on said heated cylinder prior to being creped.

25. The process according to Claim 16, wherein said web is dried to a consistency of at least about 60 percent on said heated cylinder prior to being creped.

26. The process according to Claim 25, wherein said web is dried to a consistency of at least about 70 percent on said heated cylinder prior to being creped.

27. The process according to Claim 16, wherein said web is creped from said heated cylinder utilizing a creping blade and a creping angle of from about 50 to about 125 degrees.

28. The process according to Claim 16, wherein said web is creped from said heated cylinder in a creping nip utilizing a creping fabric traveling at a speed slower than the speed of said heated rotating cylinder.

29. The process according to Claim 16, wherein said web is creped from said heated cylinder with an undulatory creping blade so as to form a reticulated biaxially undulatory product with crepe bars extending in the cross direction and ridges extending in the machine direction.

30. The process according to Claim 29, wherein said undulatory creping blade is positioned, configured and dimensioned so as to be in continuous undulatory engagement with said heated rotating cylinder over its width.

31. The process according to Claim 30, wherein said product comprises from about 8 to about 150 crepe bars per inch.

32. The process according to Claim 29, wherein said product comprises from about 4 to about 50 ridges per inch extending in the machine direction.

33. The process according to Claim 16, wherein said sheet is prepared from a fibrous furnish comprising fiber other than virgin cellulosic fiber.

34. The process according to Claim 33, wherein said furnish comprises a non-wood fiber selected from the group consisting of straw fibers, sugarcane fibers, bagasse fibers and synthetic fibers.

35. The process according to Claim 16, wherein said aqueous furnish comprises recycled fiber.

36. The process according to Claim 35, wherein the recycled fiber in said aqueous furnish comprises at least about 50 percent by weight of the fiber present.

37. The process according to Claim 36, wherein the recycled fiber present in said aqueous furnish comprises at least about 75 percent by weight of the fiber present.

38. The process according to Claim 37, wherein the cellulosic fiber present in said aqueous furnish consists essentially of recycled fiber.

39. The process according to Claim 16, wherein said step of compactively dewatering said web comprises wet-pressing said web in a transfer nip including a press roll and said heated rotating cylinder.

40. The process according to Claim 16, wherein said step of compactively dewatering said web comprises wet-pressing said web in a controlled pressure shoe press.

41. The process according to Claim 40, wherein said web is disposed on a papermaking felt in said controlled pressure shoe press.

42. The process according to Claim 16, wherein said step of compactively dewatering said furnish comprises pressing said furnish in a press nip providing a peak engagement pressure of from about 500 to about 2000 kN/m^2.

43. The process according to Claim 42, wherein said press nip is provided with an overall line load of less than about 90 kN/m.

44. The process according to Claim 16, wherein said step of compactively dewatering said furnish comprises pressing said furnish in a press nip providing a peak

engagement pressure of at least about 2,000 kN/m^2 at an overall line load of less than about 240 kN/m.

45. The process according to Claim 44, wherein said press nip imposes an asymmetric pressure distribution on the furnish, said pressure distribution being skewed such that the pressure declines from a peak pressure to a value of 20% of said peak pressure over a nip length which is no more than about half of the nip length over which it rose to said peak pressure from 20% of said peak pressure.

46. The process according to Claim 44, wherein said line load is less than about 175 kN/m.

47. The process according to Claim 46, wherein said line load is less than about 90 kN/m.

48. The process according to Claim 44, wherein the peak engagement pressure in said press nip is at least about 2,500 kN/m^2.

49. The process according to Claim 48, wherein the peak engagement pressure in said press nip is at least about 3,000 kN/m^2.

50. The process according to Claim 16, wherein said aqueous furnish comprises a chemical additive.

51. The process according to Claim 50, wherein said chemical additive comprises surface modifiers, softeners, debonders, strength aids, latexes, opacifiers, optical brighteners, dyes, pigments, sizing agents, barrier chemicals, retention aids, insolubilizers, organic or inorganic crosslinkers, and combinations thereof; said

chemicals optionally comprising polyols, starches, PPG esters, PEG esters, phospholipids, surfactants, polyamines and the like.

52. The process according to Claim 51, wherein said aqueous furnish comprises a cationic debonding agent.

53. The process according to Claim 52, wherein said aqueous furnish further comprises a nonionic surfactant.

54. The process according to Claim 16, further comprising transferring said creped web over an open draw at a speed of at least about 2000 fpm while aerodynamically supporting said web to preserve the creped structure thereof.

55. The process according to Claim 54, further comprising transferring said creped web over an open draw at a speed of at least about 2500 fpm while aerodynamically supporting said web to preserve the creped structure thereof.

56. The process according to Claim 55, wherein said web is transferred over said open draw at a speed of at least about 3000 fpm.

57. The process according to Claim 56, wherein said web is transferred over said open draw at a speed of at least about 4000 fpm.

58. The process according to Claim 57, wherein said web is transferred over said open draw at a speed of at least about 5000 fpm.

59. The improvement according to Claim 16, wherein subsequent to creping from said heated rotating cylinder, said web is throughair dried at a rate of at least

about 30 pounds of water removed per square foot of throughair drying surface per hour.

60. The improvement according to Claim 59, wherein said web is throughair dried at a rate of at least 40 pounds of water removed per square foot of throughair drying surface per hour.

61. The improvement according to Claim 60, wherein said web is dried by throughair drying at a drying rate of at least about 50 pounds of water removed per square foot of throughair drying surface per hour.

62. The method according to Claim 16, wherein said step of depositing said aqueous furnish on said foraminous support includes foam-forming said furnish on said foraminous support.

63. The method according to Claim 62, wherein said furnish is a foamed furnish and comprises from about 150 to about 500 ppm by weight of a foam-forming surfactant.

64. The method according to Claim 62, wherein said foamed furnish has a consistency of from about 0.1 to about 3 percent.

65. The method according to Claim 16, wherein at least about 5 percent of the fiber in said aqueous furnish has been subjected to a curling process.

66. The method according to Claim 65, wherein at least about 10 percent of the fiber in said aqueous furnish has been subjected to a curling process.

67. The method according to Claim 66, wherein at least about 25 percent of the fiber in said aqueous furnish has been subjected to a curling process.

68. The method according to Claim 67, wherein at least about 50 percent of the fiber in said aqueous furnish has been subjected to a curling process.

69. The method according to Claim 68, wherein at least about 75 percent of the fiber in said aqueous furnish has been subjected to a curling process.

70. The method according to Claim 69, wherein at least about 90 percent of the fiber in said aqueous furnish has been subjected to a curling process.

71. The method according to Claim 65, wherein said method of curling said fiber comprises concurrently heat-treating and convolving said fiber at an elevated temperature.

72. The method according to Claim 71, wherein said fiber is curled in a disk refiner with saturated steam at a pressure of from about 5 to about 150 psig.

73. The method according to Claim 16, further comprising the step of pressure molding said web subsequent to creping said web by deflecting said web into an impression fabric.

74. The method according to Claim 16, wherein said dewatered web is dried to a consistency of greater than about 60 percent on said heated rotating cylinder prior to being creped therefrom and re-wet with an aqueous composition subsequent to being creped from said heated rotating cylinder.

75. The method according to Claim 74, wherein said aqueous composition includes a process additive or functional additive.

76. The method according to Claim 75, wherein said additive comprises a softener, a debonder, starch, strength aids, retention aids, barrier chemicals, wax emulsions, surface modifiers, antimicrobials, botanicals, latexes, binders, absorbency aids, and combinations thereof, said additives optionally including phospholipids, polyamines, PPG esters, PEG esters and polyols.

77. The method according to Claim 76, wherein said additive is selected from the group consisting of wet strength resins, dry strength resins and softeners.

78. The method according to Claim 74, wherein said web is re-wet to a consistency of less than about 60 percent and subsequently wet-molded on an impression fabric.

79. A method of making absorbent sheet from an aqueous cellulosic furnish comprising:

(a) depositing said aqueous furnish on a foraminous support to form a nascent web;
(b) compactively dewatering said web in a transfer nip while transferring said web to a Yankee cylinder;
(c) drying said web to a consistency of from about 30 to about 90 percent on said Yankee cylinder;
(d) creping said web from said Yankee cylinder;
(e) transferring said web over an open draw to a throughdrying fabric while aerodynamically supporting said web;
(f) re-wetting said web with an aqueous composition;
(g) wet molding said re-wet web on said throughdrying fabric; and

(h) throughdrying said re-wet web wherein airflow through said sheet exhibits a characteristic Reynolds Number of less than about 1 and a characteristic dimensionless throughdrying coefficient of from about 4 to about 10.

80. A fibrous sheet having a void volume fraction of from about 0.55 to about 0.85 characterized in that said sheet exhibits a wet springback ratio of at least about 0.6 and a hydraulic diameter of from about 3×10^{-6} ft to about 8×10^{-5} ft with the provisos: (a) that when the void volume fraction of said sheet exceeds about 0.72, said hydraulic diameter of said sheet is less than about 8×10^{-6} ft; and (b) that when the void volume fraction of the sheet exceeds about 0.8, said hydraulic diameter of said sheet is less than about 7×10^{-6} ft.

81. The sheet according to Claim 79, wherein said sheet is prepared from a cellulosic furnish.

82. The sheet according to Claim 81, wherein said sheet is an absorbent sheet.

83. The absorbent sheet according to Claim 82, wherein said absorbent sheet is characterized by a wet springback ratio of at least about 0.65.

84. The absorbent sheet according to Claim 83, wherein said absorbent sheet is characterized by a wet springback ratio of between about 0.65 and 0.75.

85. The absorbent sheet according to Claim 84, wherein said absorbent sheet is characterized by a hydraulic diameter of from about 4×10^{-6} ft. to about 6×10^{-5} ft.

86. The absorbent sheet according to Claim 85, wherein said absorbent sheet is characterized by a hydraulic diameter of between about 4×10^{-6} ft and 8×10^{-6} ft.

87. The absorbent sheet according to Claim 85, wherein said absorbent sheet is characterized by a hydraulic diameter of up to about 7×10^{-6} ft.

88. An absorbent cellulosic sheet formed from a furnish comprising recycle fiber having a void volume fraction of from about 0.55 to about 0.70 characterized in that said sheet exhibits a wet springback ratio of at least about 0.6 and a hydraulic diameter of from about 4×10^{-6} to about 5×10^{-5} ft.

89. The absorbent sheet according to Claim 88, wherein the recycled fiber in said absorbent sheet comprises at least about 50 percent by weight of the fiber in the sheet.

90. The absorbent sheet according to Claim 89, wherein the recycled fiber in said absorbent sheet comprises at least about 75 percent by weight of the fiber in the sheet.

91. The absorbent sheet according to Claim 90, wherein the cellulosic fiber present in said absorbent sheet consists essentially of recycled fiber.

92. An absorbent sheet prepared from a cellulosic furnish characterized by a wet springback ratio of from about 0.4 to about 0.8 and an internal bond strength parameter g/in/mil of about 140 or greater.

93. The absorbent sheet according to Claim 92 wherein said wet springback ratio of said sheet is at least about 0.6

94. The absorbent sheet according to Claim 93 wherein said wet springback ratio is at least about 0.65.

95. In a method for making a fibrous sheet by way of a wet crepe, throughdry process, which process generally includes depositing an aqueous furnish on a foraminous support, compactively dewatering said furnish to form a web, applying said web to a heated rotating cylinder where the web is dried to a consistency of greater than about 30 percent and less than about 90 percent, creping said web from said heated cylinder at said consistency of greater than about 30 percent and less than about 90 percent and throughdrying said creped web, the improvement comprising controlling the characteristic void volume of the as-creped web such that said web exhibits a characteristic void volume upon creping in grams/g of greater than about 9.2 – 0.048X wherein X is the GMT of the as-creped product (grams/3") divided by the basis weight of the as-creped product (lbs/3000 ft^2).

96. The improvement according to Claim 95, wherein said web exhibits a characteristic void volume upon creping in grams/g of greater than about 9.5 – 0.048X wherein X is the GMT of the as-creped product (grams/3") divided by the basis weight of the as-creped product (lbs/3000 ft^2).

97. The improvement according to Claim 96, wherein said web exhibits a characteristic void volume upon creping in grams/g of greater than about 9.75 – 0.048X wherein X is the GMT of the as-creped product (grams/3") divided by the basis weight of the as-creped product (lbs/3000 ft^2).

98. The improvement according to Claim 95, wherein said web exhibits a characteristic void volume of at least about 6.5 gms/gm upon creping.

99. The improvement according to Claim 98, wherein said web exhibits a characteristic void volume of at least about 7 gms/gm upon creping.

100. The improvement according to Claim 99, wherein said web exhibits a characteristic void volume of at least about 7.5 gms/gm upon creping.

101. The improvement according to Claim 100, wherein said web exhibits a characteristic void volume of at least about 8 gms/gm upon creping.

102. The improvement according to Claim 95, utilized for making an absorbent sheet with a basis weight of at least about 12 lbs/3000 ft^2.

103. The improvement according to Claim 102, utilized for making an absorbent sheet with a basis weight of at least about 15 lbs/3000 ft^2.

104. The improvement according to Claim 103, utilized for making an absorbent sheet with a basis weight of at least about 20 lbs/3000 ft^2.

105. The improvement according to Claim 104, utilized for making an absorbent sheet with a basis weight of at least about 25 lbs/3000 ft^2.

106. The improvement according to Claim 105 utilized for making an absorbent sheet with a basis weight of at least about 30 lbs/3000 ft^2.

107. The improvement according to Claim 95, wherein said web is dewatered to a consistency of at least about 30 percent prior to being dried on said heated cylinder.

108. The improvement according to Claim 107, wherein said web is dewatered to a consistency of at least about 40 percent prior to being dried on said heated cylinder.

109. The improvement according to Claim 95, wherein said web is dried to a consistency of at least about 50 percent on said heated cylinder prior to being creped.

110. The improvement according to Claim 109, wherein said web is dried to a consistency of at least about 60 percent on said heated cylinder prior to being creped.

111. The improvement according to Claim 108 wherein said web is dried to a consistency of at least about 70 percent on said heated cylinder prior to being creped.

112. The improvement according to Claim 95, wherein said web is creped from said heated cylinder with a creping blade defining a pocket angle of from about 50 to about 125 degrees.

113. The improvement according to Claim 112, wherein said pocket angle is from about 65 to about 90 degrees.

114. The improvement according to Claim 95, wherein said web is creped from said heated cylinder with a beveled creping blade.

115. The improvement according to Claim 114, wherein said creping blade has a creping bevel of from about 0 to about 40 degrees.

116. The improvement according to Claim 115, wherein said creping blade has a creping bevel of from about 0 to about 20 degrees.

117. The improvement according to Claim 95, wherein said web is creped from said heated cylinder with an undulatory creping blade so as to form a reticulated biaxially undulatory product with crepe bars extending in the cross direction and ridges extending in the machine direction.

118. The improvement according to Claim 117, wherein said undulatory creping blade is positioned, configured and dimensioned so as to be in continuous undulatory engagement with said heated rotating cylinder over its width.

119. The improvement according to Claim 117, wherein said product comprises from about 8 to about 150 crepe bars per inch.

120. The improvement according to Claim 117, wherein said product comprises from about 4 to about 50 ridges per inch extending in the machine direction.

121. The improvement according to Claim 95, wherein said web is creped from said heated cylinder with a blade while maintaining a narrow effective creping shelf having a width of less than about 3 times the thickness of said web.

122. The improvement according to Claim 95, wherein said web is creped from said heated cylinder by way of a creping blade having a creping ledge width of from about 0.005 to about 0.025 inches.

123. The improvement according to Claim 95, wherein said sheet is prepared from a fibrous furnish comprising fiber other than virgin cellulosic fiber.

124. The improvement according to Claim 123, wherein said furnish comprises a non-wood fiber selected from the group consisting of straw fibers, sugarcane fibers, bagasse fibers and synthetic fibers.

125. The improvement according to Claim 123, wherein said aqueous furnish comprises recycled fiber.

126. The improvement according to Claim 125, wherein the recycled fiber in said aqueous furnish comprises at least about 50 percent by weight of the fiber present.

127. The improvement according to Claim 126, wherein the recycled fiber present in said aqueous furnish comprises of at least about 75 percent by weight of the fiber present.

128. The improvement according to Claim 127, wherein the cellulosic fiber present in said aqueous furnish consists essentially of recycled fiber.

129. The improvement according to Claim 95, wherein said step of compactively dewatering said web comprises wet-pressing said web in a transfer nip including a press roll and said heated rotating cylinder.

130. The improvement according to Claim 95, wherein said step of compactively dewatering said web comprises wet-pressing said web in a controlled pressure shoe press.

131. The improvement according to Claim 130, wherein said web is disposed on a papermaking felt in said controlled pressure shoe press.

132. The improvement according to Claim 95, wherein said step of compactively dewatering said furnish comprises pressing said furnish in a press nip providing a peak engagement pressure of from about 500 to about 2000 kN/m^2.

133. The improvement according to Claim 132, wherein said press nip is provided with an overall line load of less than about 90 kN/m.

134. The improvement according to Claim 95, wherein said step of compactively dewatering said furnish comprises pressing said furnish in a press nip providing a peak engagement pressure of at least about 2,000 kN/m^2 at an overall line load of less than about 240 kN/m.

135. The improvement according to Claim 134, wherein said press nip imposes an asymmetric pressure distribution on the furnish, said pressure distribution being skewed such that the pressure declines from a peak pressure to a value of 20% of said peak pressure over a nip length which is no more than about half of the nip length over which it rose to said peak pressure from 20% of said peak pressure.

136. The improvement according to Claim 134, wherein said line load is less than about 175 kN/m.

137. The improvement according to Claim 136 wherein said line load is less than about 100 kN/m.

138. The improvement according to claim 134, wherein the peak engagement pressure in said press nip is at least about 2,500 kN/m^2.

139. The improvement according to Claim 138, wherein the peak engagement pressure in said press nip is at least about 3,000 kN/m^2.

140. The improvement according to Claim 95, wherein said aqueous furnish comprises a chemical additive.

141. The improvement according to Claim 140, wherein said chemical additive comprises surface modifiers, softeners, debonders, strength aids, latexes, opacifiers, optical brighteners, dyes, pigments, sizing agents, barrier chemicals, retention aids, insolubilizers, organic or inorganic crosslinkers, and combinations thereof; said chemicals optionally comprising polyols, starches, PPG esters, PEG esters, phospholipids, surfactants, polyamines and the like.

142. The improvement according to Claim 141, wherein said aqueous furnish comprises a cationic debonding agent.

143. The improvement according to Claim 142, wherein said aqueous furnish further comprises a nonionic surfactant.

144. The improvement according to Claim 95, further comprising transferring said creped web over an open draw at a speed of at least about 2000 fpm while aerodynamically supporting said web to preserve the creped structure thereof.

145. The improvement according to Claim 144 wherein said sheet is transferred over said open draw at a speed of at least about 2500 fpm.

146. The improvement according to Claim 95, wherein subsequent to creping from said heated rotating cylinder, said web is throughair dried at a rate of at least about 30 pounds of water removed per square foot of throughair drying surface per hour.

147. The improvement according to Claim 146 wherein said web is throughair dried at a rate of at least 40 pounds of water removed per square foot of throughair drying surface per hour.

148. The improvement according to Claim 147, wherein said web is dried by throughair drying at a drying rate of at least about 50 pounds of water removed per square foot of throughair drying surface per hour.

149. A wet crepe, throughdry process for making fibrous sheet comprising the steps of:

(a) depositing an aqueous furnish on a foraminous support;

(b) compactively dewatering said furnish to form a web;

(c) applying said dewatered web to a heated rotating cylinder and drying said web to a consistency of greater than about 30 percent and less than about 90 percent; and

(d) creping said web from said heated cylinder at said consistency of greater than about 30 percent and less than about 90 percent;

wherein the furnish composition and processing of steps (a), (b) and(c), as well as the creping geometry, temperature profile of the web upon creping, moisture profile of the web upon creping and web adherence to the heated rotated cylinder are controlled such that the characteristic void volume of the web in grams/g upon creping is greater than about 9.2 – 0.048X wherein X is the GMT of the as-creped product (grams/3") divided by the basis weight of the as-creped product (lbs/3000 ft^2); and

(e) throughdrying said web subsequent to creping said web from said heated cylinder to form said sheet.

150. The method according to Claim 149, wherein said web exhibits a characteristic void volume upon creping in grams/g of greater than about 9.5 – 0.048X wherein X is the GMT of the as-creped product (grams/3") divided by the basis weight of the as-creped product (lbs/3000 ft^2).

151. The method according to Claim 96, wherein said web exhibits a characteristic void volume upon creping in grams/g of greater than about 9.75 – 0.048X wherein X is the GMT of the as-creped product (grams/3") divided by the basis weight of the as-creped product (lbs/3000 ft^2).

152. The method according to Claim 149, wherein said furnish is compactively dewatered utilizing a controlled pressure shoe press.

153. The method according to Claim 149, wherein said step of depositing said aqueous cellulosic furnish on said foraminous support includes foam-forming said furnish on said foraminous support.

154. The method according to Claim 149, wherein said furnish is a foamed furnish and comprises from about 150 to about 500 ppm by weight of a foam-forming surfactant.

155. The method according to Claim 154, wherein said foamed furnish has a consistency of from about 0.1 to about 3 percent.

156. The method according to Claim 149, wherein at least about 5 percent of the fiber in said aqueous furnish has been subjected to a curling process.

157. The method according to Claim 156, wherein at least about 10 percent of the fiber in said aqueous furnish has been subjected to a curling process.

158. The method according to Claim 157, wherein at least about 25 percent of the fiber is said aqueous furnish has been subjected to a curling process.

159. The method according to Claim 158, wherein at least about 50 percent of the fiber in said aqueous furnish has been subjected to a curling process.

160. The method according to Claim 159, wherein at least about 75 percent of the fiber in said aqueous furnish has been subjected to a curling process.

161. The method according to Claim 160, wherein at least about 90 percent of the fiber in said aqueous furnish has been subjected to a curling process.

162. The method according to Claim 156, wherein said method of curling said fiber comprises concurrently heat-treating and convolving said fiber at an elevated temperature.

163. The method according to Claim 162, wherein said fiber is curled in a disk refiner with saturated steam at a pressure of from about 5 to about 150 psig.

164. The method according to Claim 149, wherein said heated cylinder is maintained at an elevated temperature relative to its surroundings so as to produce a temperature differential of from about 5°F to about 80°F between the cylinder side of said web and the air side of said web upon creping.

165. The method according to Claim 164, wherein said temperature differential is between about 10°F and about 40°F.

166. The method according to Claim 165, wherein said temperature differential is about 15°F and about 30°F.

167. The method according to Claim 16, wherein said temperature differential is about 20°F.

168. The method according to Claim 164, further comprising the step of pressure molding said web subsequent to creping said web by deflecting said web into an impression fabric.

169. The method according to Claim 168, wherein the air side of said web is relatively moist with respect to the cylinder side of said web and the air side is deflected into said impression fabric.

170. A wet crepe, throughdry process for making fibrous sheet comprising the steps of:

(a) depositing an aqueous furnish on a foraminous support;

(b) compactively dewatering said furnish to form a web;

(c) applying said dewatered web to a heated rotating cylinder and drying said web to a consistency of greater than about 30 percent and less than about 90 percent; and

(d) creping said web from said heated cylinder at said consistency of greater than about 30 percent and less than about 90 percent;

wherein the furnish composition and processing of steps (a), (b) and(c), as well as the creping geometry, temperature profile of the web upon creping, moisture profile of the web upon creping and web adherence to the heated rotated cylinder are controlled; and

(e) throughdrying said web subsequent to creping said web from said heated cylinder to form said fibrous sheet, wherein the void volume of the sheet in grams/g is greater than about 9.2 – 0.048X wherein X is the GMT of the product (grams/3") divided by the basis weight of the product (lbs/3000 ft^2).

171. The method according to Claim 170, wherein said sheet exhibits a characteristic void volume in grams/g of greater than about 9.5 – 0.048X wherein X is the GMT of the as-creped product (grams/3") divided by the basis weight of the as-creped product (lbs/3000 ft^2).

172. The method according to Claim 171, wherein said sheet exhibits a characteristic void volume in grams/g of greater than about 9.75 – 0.048X wherein X is the GMT of the as-creped product (grams/3") divided by the basis weight of the as-creped product (lbs/3000 ft^2).

173. The method according to Claim 170, wherein said sheet exhibits a void volume of at least about 6.5 gms/gm.

174. The method according to Claim 173, wherein said sheet exhibits a void volume of at least about 7 gms/gm.

175. The method according to Claim 174, wherein said sheet exhibits a void volume of at least about 7.5 gms/gm.

176. The method according to Claim 175, wherein said sheet exhibits a void volume of at least about 8 gms/gm.

177. A method of making sheet from a fibrous furnish comprising:

(a) depositing an aqueous furnish on a foraminous support;

(b) compactively dewatering said furnish to form a web;

(c) applying said web to a heated rotating cylinder;

(d) maintaining the surface of said rotating cylinder at an elevated temperature relative to its surroundings so as to produce a temperature gradient between the air and cylinder sides of said web;

(e) drying said web on said cylinder to a consistency of between about 30 to about 90 percent;

(f) creping said web from said cylinder, wherein said creping is operative to delaminate said web and said web exhibits a characteristic void volume upon creping in grams/g of grater than about 9.2 – 0.048X wherein X is the GMT of the as-creped product (grams/3") divided by the basis weight of the as-creped product (lbs/3000 ft^2); and

(g) drying said web to form said said sheet.

178. The method according to 177, wherein said web exhibits a characteristic void volume upon creping in grams/g of greater than about 9.5 – 0.048X wherein X is the GMT of the as-creped product (grams/3") divided by the basis weight of the as-creped product (lbs/3000 ft^2).

179. The method according to Claim 177, wherein said web exhibits a characteristic void volume upon creping in grams/g of greater than about 9.75 – 0.048X wherein X is the GMT of the as-creped product (grams/3") divided by the basis weight of the as-creped product (lbs/3000 ft^2).

180. The method according to Claim 177, wherein said web exhibits a characteristic void volume upon creping of at least about 6.5 grams/gm.

181. The method according to Claim 180, wherein said web exhibits a characteristic void volume upon creping of at least about 7 grams/gm.

182. The method according to Claim 181, wherein said web exhibits a characteristic void volume upon creping of at least about 7.5 grams/gm.

183. The method according to Claim 182, wherein said web exhibits a characteristic void volume upon creping of at least about 8 grams/gm.

184. The method according to Claim 177, wherein the air side of said web is at a temperature of from about160°F to about 210°F upon creping.

185. The method according to Claim 184, wherein the air side of said web is at a temperature of from about 180°F to about 200°F upon creping.

186. The method according to Claim 185, wherein the air side of said web is at a temperature of about 190°F upon creping.

187. The method according to Claim 177, wherein the cylinder side of said sheet is at a temperature of from about 210°F to about 240°F upon creping.

188. The method according to Claim 187, wherein the cylinder side of said sheet is from about 220°F to about 230°F upon creping.

189. The method according to Claim 177, wherein steam is supplied to said heated cylinder at a pressure of from about 30 to about 150 psig.

190. The method according to Claim 189, wherein steam is supplied to said heated cylinder at a pressure of at least about 100 psig.

191. The method according to Claim 177, wherein said step of compactively dewatering said furnish comprises pressing said furnish in a controlled pressure shoe press.

192. A method of making fibrous sheet comprising:

(a) depositing an aqueous furnish on a foraminous support;
(b) compactively dewatering said furnish to form a web;
(c) applying said web to a heated rotating cylinder;
(e) maintaining the surface of said rotating cylinder at an elevated temperature relative to its surroundings so as to produce a temperature gradient between the air and cylinder sides of said web;
(e) drying said web on said cylinder to a consistency of between about 30 to about 90 percent;
(f) creping said web from said cylinder, wherein said creping is operative to delaminate said web; and
(g) drying said web to form said absorbent sheet, wherein the void volume in grams/g of said sheet is greater than about 9.2 – 0.048X wherein X is the GMT of the sheet (grams/3") divided by the basis weight of the sheet (lbs/3000 ft^2).

193. The method according to Claim 192, wherein said sheet exhibits a void volume in grams/g of greater than about 9.5 – 0.048 X wherein X is the GMT of the sheet (grams/3") divided by the basis weight of the sheet (lbs/3000 ft^2).

194. The method according to Claim 193, wherein said sheet exhibits a void volume in grams/g of greater than about 9.75 – 0.048 X wherein X is the GMT of the sheet (grams/3") divided by the basis weight of the sheet (lbs/3000 ft^2).

195. The method according to Claim 192, wherein said sheet exhibits a void volume of at least about 6.5 gms/gm.

196. The method according to Claim 195, wherein said sheet exhibits a void volume of at least about 7 gms/gm.

197. The method according to Claim 196, wherein said sheet exhibits a void volume of at least about 7.5 gms/gm.

198. The method according to Claim 197, wherein said sheet exhibits a void volume of at least about 8 gms/gm.

199. A wet crepe, throughdry process for making sheet comprising the steps of:

(a) depositing an aqueous fibrous furnish on a foraminous support;
(b) compactively dewatering said furnish to form a web;
(c) applying said dewatered web to a heated rotating cylinder and drying said web to a consistency of from about 15 percent to about 60 percent; and
(d) creping said web from said heated cylinder at said consistency of from about 15 percent to about 60 percent in a creping nip utilizing a creping fabric traveling at a speed slower than the speed of said heated rotating cylinder so as to apply a percent crepe to said web of from about 5 percent to about 50 percent;
(e) throughdrying said web subsequent to creping said web from said heated cylinder to form said sheet,

wherein said sheet has a void volume fraction of from about 0.55 to about 0.85 and is characterized in that said sheet exhibits a wet springback ratio of at least

about 0.6 and a hydraulic diameter of from about 3×10^{-6} ft to about 8×10^{-5} ft with the provisos: (a) that when the void volume fraction of said sheet exceeds about 0.72, said hydraulic diameter of said sheet is less than about 8×10^{-6} ft; and (b) that when the void volume fraction of the sheet exceeds about 0.8, said hydraulic diameter of said sheet is less than about 7×10^{-6} ft.

200. The method according to Claim 199, wherein a percent crepe of from about 10 to about 35 percent is applied to said web by way of said creping step.

201. The method according to Claim 200, wherein a percent crepe of about 15 percent is applied to said web by way of said creping step.

202. The method according to Claim 199, wherein said web is creped from said heated cylinder at a consistency of from about 25 percent to about 60 percent.

203. The method according to Claim 202, wherein said web is creped from said heated cylinder at a consistency of from about 40 to about 60 percent.

204. The method according to Claim 199, further comprising the step of creping said web from said creping fabric utilizing a second fabric traveling at a speed slower than said creping fabric so as to apply an additional percent crepe of from about 5 percent to about 50 percent.

205. The method according to Claim 204, wherein an additional percent crepe of from about 10 to about 35 percent is applied to said web by way of transfer from said creping fabric to said second fabric.